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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/916,056

07/26/2001

James D. Miller

P00477-US1

7276

3017

7590

05/19/2004

BARLOW, JOSEPHS & HOLMES, LTD.
101 DYER STREET
5TH FLOOR
PROVIDENCE, RI 02903

EXAMINER

DINH, PHUONG K

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,056

Applicant(s)

MILLER ET AL.

Examiner

Phuong KT Dinh

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1,4-6,8,11,13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,11,13 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 8, 11, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumberger (U.S. Patent 5,230,632) in view of Juskey (U. S. Patent 5,371,404) and further in view of Zhuo (U. S. Patent 6,162,849).

Regarding claims 1, 4, 8, 11, 13 and 15, Baumberger discloses an electronic connector 10 comprising: a heat generating electronic component; and a housing 31, which is molded over said heat generating electronic component. Baumberger discloses the claimed invention except for said housing being made of a thermally conductive material; said thermally conductive material being a net-shape-injection moldable polymer composition with a base matrix of liquid crystal polymer material loaded with thermally conductive filler. Juskey discloses the housing being made of a thermally conductive material 20 see figures 102. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baumberger to provide the housing being made of the thermally conductive material as taught by Juskey so as to provide an EMI/RFI shield around the IC in order to form a shielding package.

And further Zhuo discloses a base matrix of liquid crystal polymer material.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baumberger and Juskey to provide a base matrix of liquid crystal polymer material as taught by Zhuo so as to provide good electric insulative property, high mechanical strength and low coefficient of thermal expansion.

3. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebby (U. S. Patent 5,511,138) in view of Juskey (U. S. Patent 5,371,404) and further in view of Zhuo (U. S. Patent 6,162,849).

4. Regarding claims 1 and 5, Lebby discloses an electronic connector 102, 203 comprising: a heat generating electronic component; and a housing, which is molded over said heat generating electronic component. Lebby discloses the claimed invention except for said housing being made of a thermally conductive material; said thermally conductive material being a net-shape-injection moldable polymer composition with a base matrix of liquid crystal polymer material loaded with thermally conductive filler. Juskey and Zhuo disclosed as discussed above.

5. Regarding claim 6, Lebby (column 5) discloses the electrical connector is an opto-electronic connector interface between fiber optic cable and electronic cable.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong KT Dinh whose telephone number is 571-272-2090. The examiner can normally be reached on 8 -5, 5 days a week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Field can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Phuong Dinh
May 15, 2004.